

Name: _____

Date: _____

PC: Solving Rational Equations and Inequalities Graphically Review

1. Solve the following equation graphically by doing each of the following:
 - (a) Draw a complete graph of the function showing all intercepts and asymptotes.
 - (b) Write the window settings you use on your graph.
 - (c) Find the solution set

$$\frac{2x-5}{x+1} = \frac{3}{x^2+x}$$

TURN OVER

Solve the following rational inequalities graphically by doing the following:

- (a) Draw a complete graph of the function showing all intercepts and asymptotes.
- (b) Write the window settings you use on your graph.
- (c) **(Optional)** Using your graph, draw a number line with critical points that shows the values of x that satisfy the inequality.
- (d) State the solution set using both set builder notation and interval notation.

2. $\frac{x+4}{x+2} \geq \frac{1}{3}$

3. $\frac{2}{x-2} + \frac{5}{x} \leq 7$

Name: _____ Date: _____
PC: Solving Rational Equations and Inequalities Graphically Homework

Please answer BOTH questions showing all necessary steps in the spaces provided on this sheet. It will be *collected* tomorrow.

1. Solve the following equation graphically by doing each of the following:
 - (a) Draw a complete graph of the function showing all intercepts and asymptotes.
 - (b) Write the window settings you use on your graph.
 - (c) Find the solution set

$$\frac{10}{x^2} + \frac{30}{(10-x)^2} = 4$$

2. Solve the following rational inequality below graphically by doing the following:
- (a) Draw a complete graph of the function showing all intercepts and asymptotes.
 - (b) Write the window settings you use on your graph.
 - (c) **(Optional)** Using your graph, draw a number line with critical points that shows the values of x that satisfy the inequality.
 - (d) State the solution set using both set builder notation and interval notation.

$$\frac{2}{x} + \frac{1}{2x} \leq 7$$